THE CLAIMS

1. (Currently Amended) A machine for making a non-woven material by aerological means comprised of:

a forming and conveying surface for the non-woven material, which is permeable to air,

a dispersion chamber surmounting the forming and conveying surface,

means of supplying the dispersion chamber with fibers intended to form the non-woven material,

~~means, particularly vacuum means,~~ vacuum means located under the forming and conveying surface of the non-woven material that ~~are capable of producing~~ produces an air flow inside the dispersion chamber that allows the fibers inside the chamber to disperse and projects ~~them~~ the fibers onto the forming and conveying surface,

characterized by the fact that said vacuum means are capable of producing a vacuum in a ~~zone called the vacuum zone of~~ vacuum zone of the forming and conveying surface of the non-woven material that extends under the dispersion chamber and downstream from it, with a reduction in vacuum speed between the upstream and downstream parts of said zone.

2. (Currently Amended) The machine in Claim 1, characterized by the fact that ~~since~~ the downstream wall of the ~~vacuum~~ dispersion chamber ~~is~~ comprises a plate, and the lower edge of said downstream wall delimits--along with the upper end of the forming and conveying surface ~~of~~ for the non-woven material--a space for

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passage whose height e is greater than the thickness of the non-woven material coming out of the dispersion chamber.

3-21. (Canceled)

22. (Previously Presented) The machine in Claim 2, characterized by the fact that the height e is 5 to 50 mm.

23. (Previously Presented) The machine in Claim 2, characterized by the fact that the lower edge of the downstream wall is comprised of a rotary cylinder, potentially porous.

24. (Previously Presented) The machine in Claim 1, characterized by the fact that the vacuum means are comprised of a single vacuum tank in which the vacuum conditions vary from the upstream to the downstream part of the vacuum zone.

25. (Previously Presented) The machine in Claim 1, characterized by the fact that the vacuum means are comprised of a multi-stage vacuum tank, with each stage having distinct vacuum conditions.

26. (Previously Presented) The machine in Claim 25, characterized by the fact that a first stage developing the highest vacuum speed (V1) is located under the dispersion chamber in the primary section of the vacuum zone extending up to the distance (d) perpendicular to the lower edge of the downstream wall of the dispersion chamber and by the fact that at least one second stage, developing a vacuum speed V2 less than V1 extends

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downstream from the first stage over a secondary section of the vacuum zone.

27. (Previously Presented) The machine in Claim 26, characterized by the fact that the distance d is from 5 to 20 mm.

28. (Previously Presented) The machine in Claim 26, characterized by the fact that in the secondary section of the vacuum zone, it has only one second stage in which the vacuum speed (V2) decreases gradually from upstream to downstream of said secondary section.

29. (Previously Presented) The machine in Claim 26, characterized by the fact that in the secondary section of the vacuum zone, it has a plurality N of successive second stages.

30. (Previously Presented) The machine in Claim 29, characterized by the fact that the vacuum speed (V3) is constant in each of these N second stages.

31. (Previously Presented) The machine in Claim 29, characterized by the fact that the vacuum speed (V4) in each of the N second stages gradually decreases from upstream to downstream of said stage.

32. (Previously Presented) The machine in Claim 29, characterized by the fact that the vacuum speed (V5) is constant in some second stages and gradually decreases from upstream to downstream in other second stages.

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33. (Currently Amended) The machine in ~~Claim 1,~~ Claim 26, characterized by the fact that ~~it has~~ at least one compressive roller is disposed above the secondary section.

34. (Previously Presented) The machine in Claim 33, characterized by the fact that:

in the secondary section of the vacuum zone, it has a plurality N of successive second stages; and

the compressive roller is placed at right angles to the interface between two successive second stages.

35. (Previously Presented) The machine in Claim 33, characterized by the fact that the compressive roller is a short distance (T) from the perpendicular of the lower edge of the downstream wall of the dispersion chamber, preferably a distance from 10 to 30 mm.

36. (Previously Presented) The machine in Claim 22, characterized by the fact that:

the lower edge of the downstream wall is comprised of a rotary cylinder, potentially porous;

the vacuum means are comprised of a single vacuum tank in which the vacuum conditions vary from the upstream to the downstream part of the vacuum zone;

the vacuum means are comprised of a multi-stage vacuum tank, with each stage having distinct vacuum conditions.

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37. (Currently Amended) The machine in Claim 36, characterized by the fact that:

~~the distance d is from 5 to 20 mm;~~

in ~~the~~ a secondary section of the vacuum zone, it has only one second stage in which the vacuum speed (V2) decreases gradually from upstream to downstream of said secondary section;

in the secondary section of the vacuum zone, it has a ~~plurality N of~~ plurality of successive second stages.

38. (Currently Amended) The machine in Claim 37, characterized by the fact that the vacuum speed (V3) is constant in each of ~~these N second~~ these second stages.

39. (Currently Amended) The machine in Claim 37, characterized by the fact that:

the vacuum speed (V4) in each of ~~the N second~~ the second stages gradually decreases from upstream to downstream of said stage;

the vacuum speed (V5) is constant in some second stages and gradually decreases from upstream to downstream in other second stages.

40. (Currently Amended) The machine in Claim 2, characterized by the fact that ~~it has~~ at least one compressive roller is disposed above ~~the~~ a secondary section of the vacuum zone located downstream of a primary section of the vacuum zone, the secondary section developing a vacuum speed V2 less than a vacuum speed V1 in the primary section.

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41. (Currently Amended) The machine in Claim 22, characterized by the fact that ~~it has~~ at least one compressive roller is disposed above ~~the~~ a secondary section of the vacuum zone located downstream of a primary section of the vacuum zone, the secondary section developing a vacuum speed V2 less than a vacuum speed V1 in the primary section.

42. (Currently Amended) The machine in Claim 36, characterized by the fact that ~~it has~~ at least one compressive roller is disposed above ~~the~~ a secondary section of the vacuum zone located downstream of a primary section of the vacuum zone, the secondary section developing a vacuum speed V2 less than a vacuum speed V1 in the primary section.

43. (Previously Presented) The machine in Claim 37, characterized by the fact that it has at least one compressive roller above the secondary section.

44. (Previously Presented) The machine in Claim 39, characterized by the fact that it has at least one compressive roller above the secondary section.

45. (Previously Presented) The machine in Claim 34, characterized by the fact that the compressive roller is a short distance (T) from the perpendicular of the lower edge of the downstream wall of the dispersion chamber, preferably a distance from 10 to 30 mm.

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